forming a semiconductor film over a substrate; and

irradiating said semiconductor film by scanning with at least one pair of linear infrared lights in a predetermined direction,

wherein one of said linear infrared lights is located over said substrate and the other one of said linear infrared lights is located at a backside of said substrate.

3. (New) A method according to claim 2, further comprising a step of introducing at least one impurity element into said semiconductor film before said irradiating.

4. (New) A method according to claim 2, wherein said semiconductor film comprises silicon or silicon compound represented by $Si_xGe_{1-x}$.

5. (New) A method according to claim 2, further comprising a step of forming gate electrode over said semiconductor film with a gate insulating film interposed therebetween.

6. (New) A method according to claim 2, further comprising a step of forming gate electrode over said substrate before

7. (New) A method according to claim 2, wherein said semiconductor device having an EL display device.

8. (New) A method for manufacturing semiconductor device comprising the steps of:

forming a semiconductor film over a substrate; and

irradiating said semiconductor film by scanning with at least one pair of linear infrared lights in a predetermined direction so as to form and move a temperature gradient in the semiconductor film,

wherein said upper linear infrared light is located over said semiconductor film and said lower linear infrared light is located at an underside of said semiconductor film.

9. (New) A method according to claim 8, further comprising a step of introducing at least one impurity element into said semiconductor film before said irradiating.

10. (New) A method according to claim 8, wherein said semiconductor film comprises silicon or silicon compound represented by $Si_xGe_{1-x}$.

11. (New) A method according to claim 8, further comprising a step of forming gate electrode over said semiconductor film with a gate insulating film interposed therebetween.

12. (New) A method according to claim 8, further comprising a step of forming gate electrode over said substrate before forming said semiconductor film.

13. (New) A method according to claim 8, wherein said semiconductor device having an EL display device.

14. (New) A method for manufacturing a semiconductor device comprising steps of:

forming a semiconductor film over a substrate; and

irradiating said semiconductor film with at least one pair of linear infrared lights while moving said substrate in a direction perpendicular to the linear infrared light,

wherein one of said linear infrared lights is located over said substrate and the other one of said linear infrared lights is located at a backside of said substrate.

15. (New) A method according to claim 14 further comprising

16. (New) A method according to claim 14 wherein said semiconductor film comprises silicon or silicon compound represented by $Si_xGe_{1-x}$.

17. (New) A method according to claim 14 further comprising a step of forming gate electrode over said semiconductor film with a gate insulating film interposed therebetween.

18. (New) A method according to claim 14 further comprising a step of forming gate electrode over said substrate before forming said semiconductor film.

19. (New) A method according to claim 14 wherein said semiconductor device having an EL display device.

20. (New) A method for manufacturing semiconductor device comprising the steps of:

forming an amorphous semiconductor film over a substrate; and

crystallizing the semiconductor film by scanning with at least one pair of upper and lower linear infrared lights in a predetermined direction,

wherein said upper linear infrared light is located over said substrate and said lower linear infrared light is located at a backside of said substrate.

21. (New) A method according to claim 20, wherein a temperature gradient are formed in said semiconductor film and moves in the predetermined direction.

22. (New) A method according to claim 20, wherein the predetermined direction is corresponding to a direction of crystal growth to be proceeded.

23. (New) A method according to claim 22, wherein the direction of the crystal growth is parallel with the semiconductor film.

24. (New) A method according to claim 23, wherein a speed of said scanning is corresponding to a rate of the crystal growth.

25. (New) A method according to claim 20, wherein semiconductor film comprises silicon or silicon compound

26. (New) A method according to claim 20, further comprising a step of forming gate electrode over said semiconductor film with a gate insulating film interposed therebetween.

27. (New) A method according to claim 20, further comprising a step of forming gate electrode over said substrate before forming said semiconductor film.

28. (New) A method according to claim 20, wherein said device is an EL display device.

29. (New) A method for manufacturing semiconductor device comprising the steps of:

forming an amorphous semiconductor film over a substrate; and

crystallizing the semiconductor film by scanning the semiconductor film with at least one pair of upper and lower linear infrared lights in a direction in order to form and move a temperature gradient the semiconductor film,

wherein said upper linear infrared light is located over said semiconductor film and said lower linear infrared

30. (New) A method according to claim 29, wherein the scanning direction coincide with the direction of crystal growth in the semiconductor film.

31. (New) A method according to claim 29, wherein crystal growth in the semiconductor film expends in the direction parallel with the semiconductor film.

32. (New) A method according to claim 29, wherein the semiconductor film comprises silicon or silicon compound represented by $Si_xGe_{1-x}$.

33. (New) A method according to claim 29, further comprising a step of forming gate electrode over said semiconductor film with a gate insulating film interposed therebetween.

34. (New) A method according to claim 1, further comprising a step of forming gate electrode over said substrate before forming said semiconductor film.

35. (New) A method according to claim 1, wherein said

36. (New) A method for manufacturing a semiconductor device comprising steps of:

forming an amorphous semiconductor film over a substrate; and

crystallizing said semiconductor film by irradiating said semiconductor film with at least one pair of linear infrared lights while moving said substrate in a perpendicular to the linear infrared lights,

wherein one of said linear infrared lights is located over said substrate and the other one of said linear infrared lights is located at a backside of said substrate.

37. (New) A method according to claim 36, wherein said semiconductor film comprises silicon or silicon compound represented by $Si_xGe_{1-x}$.

38. (New) A method according to claim 36, further comprising a step of forming gate electrode over said semiconductor film with a gate insulating film interposed therebetween.

39. (New) A method according to claim [illegible], further

40. (New) A method according to claim 36, wherein said semiconductor device having an EL display device.

41. (New) A method for manufacturing a semiconductor device comprising steps of:

forming an amorphous semiconductor film over a substrate; and

crystallizing said semiconductor film by scanning with a plurality pairs of linear infrared lights in a direction perpendicular to a longitudinal direction of the linear infrared lights, each of said pairs of pairs of linear infrared lights consisting of an upper linear infrared light and a lower linear infrared light,

wherein each upper linear infrared light is located over said substrate and each lower linear infrared light is located at a backside of said substrate.

42. (New) A method according to claim 41, wherein said semiconductor film comprises silicon or silicon compound represented by $Si_xGe_{1-x}$.

43. (New) A method according to claim 41, further